



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,506	10/17/2003	Rangarajan Sundar	P957 US	2003
28390	7590	06/21/2006	EXAMINER	
MEDTRONIC VASCULAR, INC.			BARRETT, THOMAS C	
IP LEGAL DEPARTMENT			ART UNIT	
3576 UNOCAL PLACE			PAPER NUMBER	
SANTA ROSA, CA 95403			3738	

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/688,506	Applicant(s) SUNDAR, RANGARAJAN	
	Examiner Thomas C. Barrett	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 1-6, the new limitation "the stent formed from the permanent portion by removing the detachable portion with the pooled coating" is essentially a product by process type of limitation.

Regarding claims 17-20, the new limitation "with pooled coating" is not positively recited.

The Applicant argues, "Buirge also teaches away in that it discloses that rigid layer 16 provides structural integrity and acts as a stent (Buirge, col. 3, lines 39-41). As such, the dipping process to form the long tube with layers 12, 14 and 16 and then subsequently cutting the long tube, is the process of forming individual stent pumps, not the process of coating an individual stent as required by the present invention. The coating of the individual stent pumps including layer 16, which has been identified as acting as a stent, occurs after the long tube has been cut." The "detachable portion" can be considered anything, whether it is another stent or just scrap metal. The coating of the stent occurs before the long tube is cut and the ends of the stent are coated after the detaching step (col. 4, lines 32-52).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Buirge (5,735,897). Buirge discloses a stent delivery system comprising: catheter; balloon operably attached to the catheter; and stent disposed on the balloon (col. 2, lines 37-38); coating disposed on the stent, the coating applied to a preliminary stent comprising a permanent portion and a detachable portion while retaining the preliminary stent by the detachable portion, the stent formed from the permanent portion by removing the detachable portion. In column 4, lines 32-52, Buirge discloses that “a long tube of stent-pump is prepared and then individual stents are cut off.” If one considers the long tube, or preliminary stent, capable of forming, for example, three stents, then the first and third stents can be considered the first and second detachable portions respectively as claimed and the second, or middle stent, the permanent portion. The ends are finished with additional coating (col. 4, lines 50-52).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3738

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buirge (5,735,897) as above in view of admissions in the present specification. Buirge discloses a stent delivery system, which comprises a stent made by detaching the detachable portions of the stent. However, Buirge does not disclose the detachable portion having a pooled coating. The background of the present specification states:

"When the coating is applied, the stent is generally supported on a fixture, such as a mandrel or similar device that allows the stent to be immersed in or sprayed with the coating material. The stent is retained on the fixture to prevent the stent from sliding. Cones aligned with the long axis and inserted in the ends of the stent, supporting pins, or clips can be used to retain the stent. Possible retainer materials that can be used to reduce liquid adhesion to the retainer include Delrin, Teflon, or stainless steel."

The stents of Buirge are made on a mandrel, and therefore it is well known as admitted by the applicant to use cones, supporting pins or clips which the applicant also admits leads to pooling on the detachable portions.

Regarding claims 10-11, Buirge discloses a stent delivery system, which comprises a stent made by detaching ends of the stent by cutting. However, Buirge does not disclose exactly how the detachable ends are cut off. The use of lasers or mechanical cutting devices is well known to ones of ordinary skill in the art for cutting and making stents.

Regarding claims 10-11, Buirge discloses a stent delivery system, which comprises a coated stent. However, Buirge does not disclose applying the coating by spraying. Spraying or dipping of stents to apply coatings is well known to ones of ordinary skill in the art as obvious equivalents, often cited together as alternative

methods, e.g. in Hossainy et al. (6,153,252- col. 1, lines 25-27) and Harry (2002/0038146- paragraph [0038]).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

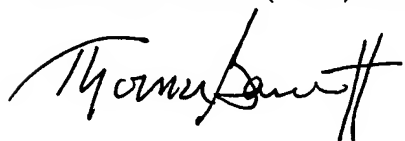
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas C. Barrett whose telephone number is (571) 272-4746. The examiner can normally be reached Tuesday-Friday between 9:00 A.M. and 6:00 P.M.

Art Unit: 3738

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thomas Barrett', with a stylized flourish at the end.

Thomas Barrett  
Examiner  
Art Unit: 3738